

'Youth-at-Risk' –2009 Bullying & Health-Risk Behaviors

RI Public High School Students



RI Departments of Health and Elementary & Secondary Education

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Introduction: This report examines differences in health-risk behaviors between bullied and non-bullied high school students in Rhode Island (RI). It evaluates 26 risk-measures from RI's Youth Risk Behavior Survey (YRBS).

The RI YRBS: The RI YRBS is part of a system of biennial surveys of random samples of public high school students in 60+ states and municipalities nationwide. The Centers for Disease Control and Prevention developed the YRBS to monitor risk behaviors related to the major causes of injury, disease, and mortality. In the spring of 2009, 3,213 RI 9th to 12th grade students participated in the YRBS. The findings here are representative of public high school students statewide, and may be used to inform policy and programs alike.

'Bullying': Students were asked, "During the past 12 months, have you ever been bullied on school property? A) Yes; B) No," and their responses were parsed into those two categories.

Using the data: The relationship between bullying and risk behaviors may be 1) 'correlated' and/or 2) 'significant.' 1) 'Correlation' refers to association, not causation (e.g., forced intercourse was three times higher for students that were bullied, but being bullied doesn't cause one to be a rape victim). The correlation coefficient (r) is used to evaluate the association between bullying and overall health-risks. An r -value of '0.00' is no correlation, and '1.00' is perfect correlation (i.e., the two variables change in tandem). 2) 'Significance' refers to how likely it is that there is an actual or 'real' difference in the reported rates between two groups. This is important because sample surveys produce estimates, which may vary from true population values. Lastly, the 26 risk-measures are all negative indicators, so lower values are desired.

2009 Highlights

There was only a modest correlation between being bullied as a student and overall health-risks ($r = 0.503$), however, violence and mental health risks were clearly elevated for this population ($r = 0.926$).

Approximately 8,300 RI public high school students (16%) were bullied in 2009 (Chart 1). The prevalence of 'bullying' was similar for males and females, and for high-performing ('A&B' grades) and low-performing students ('D&F' grades). Gay, lesbian or bisexual students or those unsure of their sexuality had a higher incidence of 'bullying' than their heterosexual peers. Likewise, 9th and 10th graders and students with a physical or emotional disability were more likely to be bullied. It appears that younger students or those that were 'different,' either physically, sexually, or emotionally, were more at-risk for victimization.

The violence related health-risks for bullied students were significant (Chart 2). Bullied students were almost twice as likely to get in physical fights (39%) than their non-bullied peers, and over twice as likely to 'cut' school (15%) because they felt unsafe. Dating violence was over two times higher (20%) for bullied students, and forced intercourse was three times higher (16%).

Mental health risks were also significantly higher for bullied students. Twice as many bullied students felt 'sad' or 'hopeless' (43%), more of them planned suicide (22%), and the attempted suicide rate was twice as high for this population (13%).

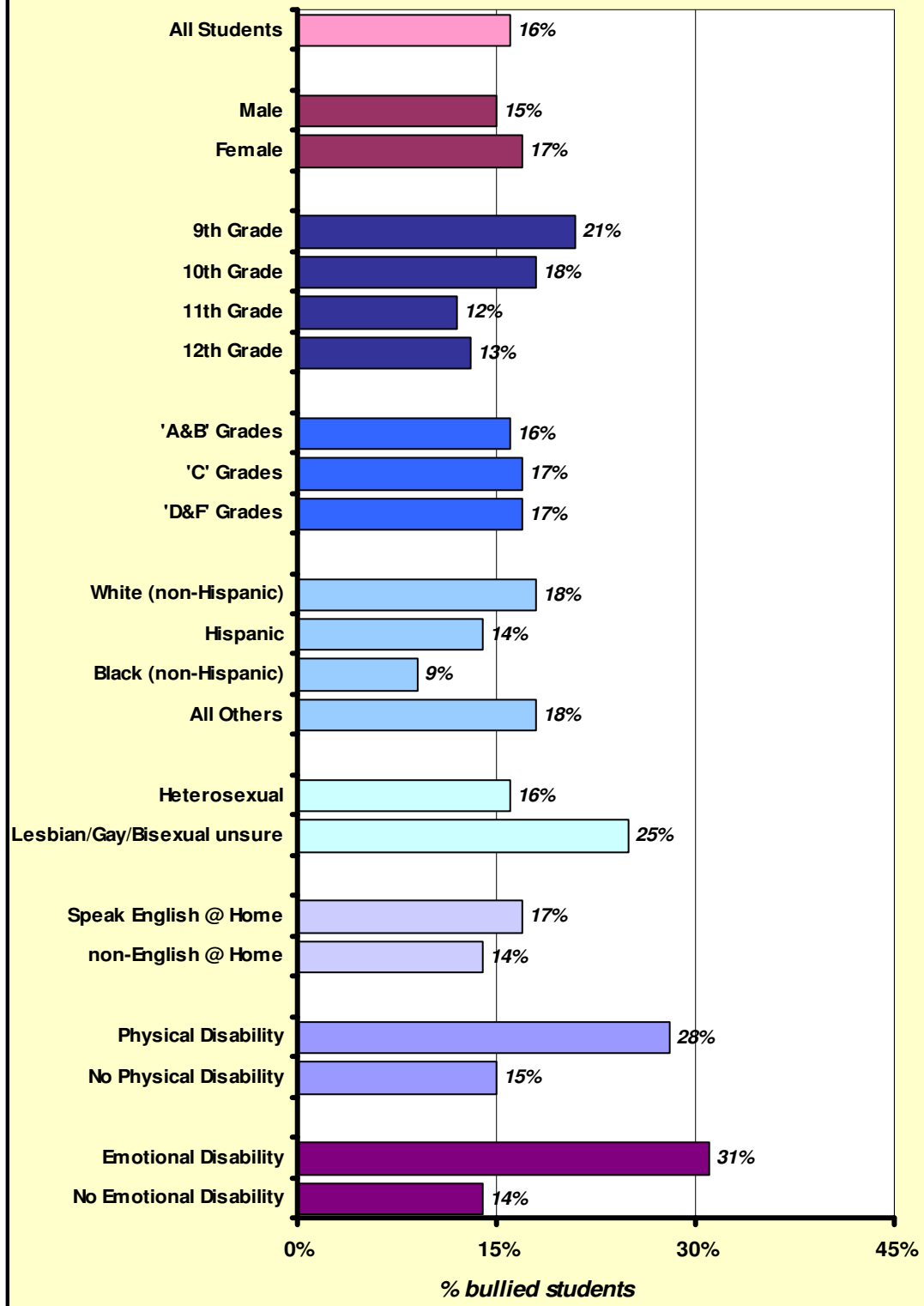
Other risk behaviors were also associated with bullying. Twice as many bullied students tried inhalants (15%), and more of these students abused painkillers without a prescription (21%). These students were also more likely to ride with a driver that had been drinking alcohol (29%).

Some health-risks were not statistically different for bullied versus non-bullied students. Even though more bullied students tried smoking (45%), the current smoking rates were similar, as were drinking and marijuana use rates. Bullied students also had similar sexual behavior to their non-bullied peers. Injury risks were comparable, including seat belt, and helmet use. Finally, physical activity measures were similar for both groups.

Educators, health professionals and parents are becoming more aware of the negative consequences of bullying. 'Zero tolerance' for this behavior should be a shared, ultimate goal for everyone. Understanding who is at-risk for persecution, and what those risks are is central to the dialogue. Starting in 2011, the YRBS will include a question to address cyber (electronic) bullying. As bullying behavior enters new venues, responses must be likewise targeted.

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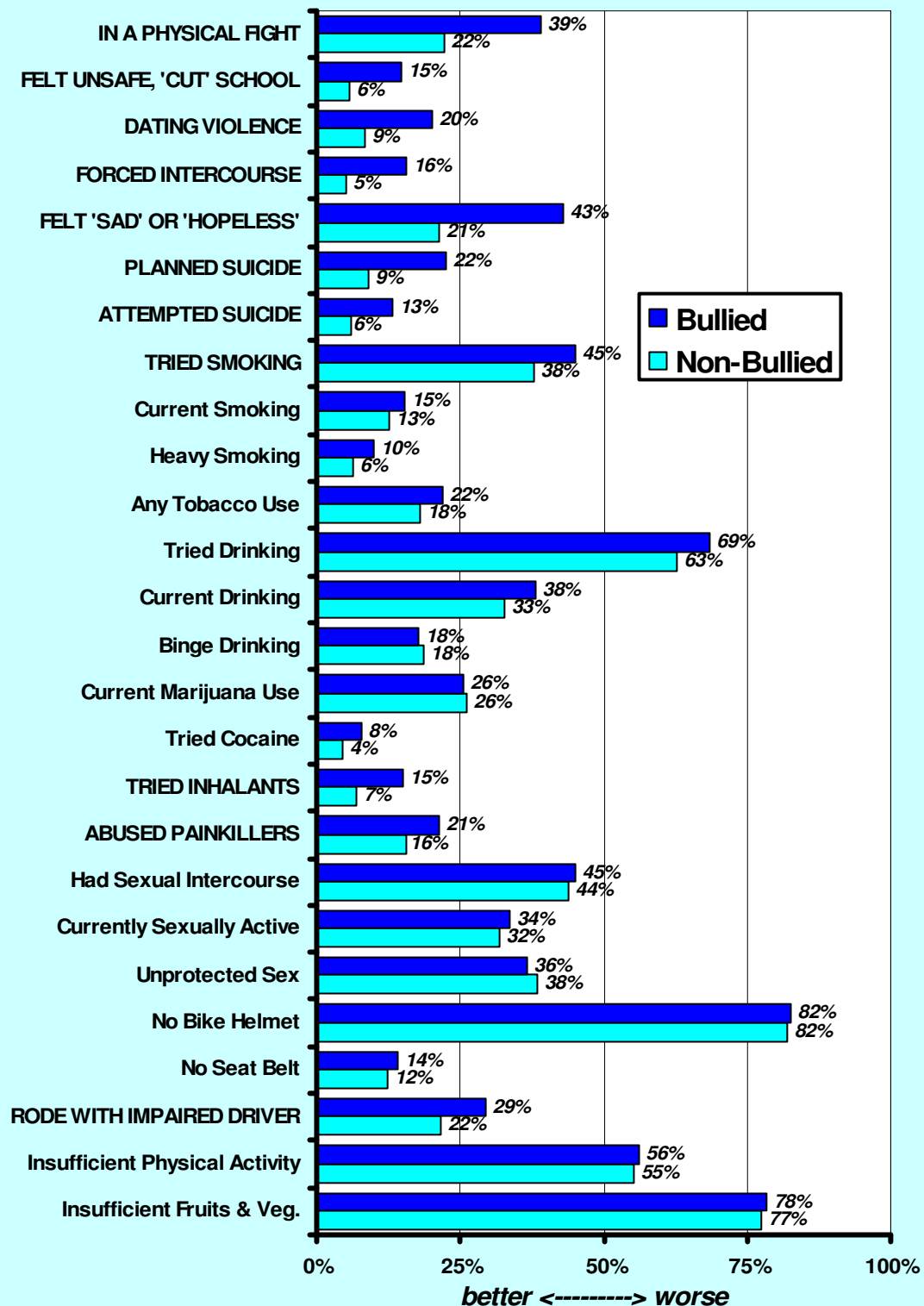
Chart 1: 2009 Prevalence of Bullied Students
~by demographic group~



Source: 2009 RI high school YRBS (n=3,213); raw data and definitions are in Table 1 (p4)

Chart 2: 'Bullied' vs. 'Non-Bullied' (2009 H.S. Health-Risks)

~significant differences are in CAPS~



Source: 2009 RI high school YRBS (n=3,213); raw data and definitions are in Table 1 (p4)

Table 1: H.S. Health-Risks Data by 'Bullying'

Measure		Description	RI 2009 DATA ¹					
			'Bullied' Students	'Non-Bullied' Students	'Bullied' 95% CIs ²		'Non-Bullied' 95% CIs ²	
VIOLENCE	In a Physical Fight	1+ times, past yr.	39.1%	22.1%	34.3%	44.0%	20.4%	23.9%
	Felt Unsafe, 'Cut' School	on 1+ days, past mo.	14.6%	5.6%	11.2%	18.0%	4.7%	6.5%
	Dating Violence	hit by boy/girlfriend, past yr.	20.1%	8.5%	16.3%	24.0%	7.3%	9.7%
	Forced Intercourse	ever	15.7%	5.1%	12.4%	19.1%	4.2%	6.0%
MENTAL HEALTH	Felt 'Sad' or 'Hopeless'	for 2+ wks., past yr.	43.1%	21.4%	38.3%	47.9%	19.7%	23.1%
	Planned Suicide	past yr.	22.4%	8.9%	18.4%	26.4%	7.7%	10.1%
	Attempted Suicide	1+ times, past yr.	13.3%	6.0%	9.9%	16.6%	5.0%	7.1%
TOBACCO	Tried Smoking	ever	45.1%	37.8%	40.1%	50.2%	35.7%	40.0%
	Current Smoking	smoked 1+ days, past mo.	15.4%	12.7%	11.7%	19.1%	11.2%	14.2%
	Any Tobacco Use	cigs, cigars, smokeless tobac. past mo.	22.1%	18.1%	17.7%	26.4%	16.3%	19.8%
ALCOHOL	Tried Drinking	1+ drink on 1+ days, ever	68.6%	62.7%	63.8%	73.3%	60.6%	64.8%
	Current Drinking	1+ days, past mo.	38.1%	32.8%	33.2%	43.0%	30.8%	34.9%
	Binge Drinking	5+ drinks 1+ days past mo.	17.9%	18.5%	14.0%	21.7%	16.8%	20.2%
DRUGS	Current Marijuana Use	1+ times, past mo.	25.6%	26.1%	21.3%	29.9%	24.2%	28.0%
	Tried Cocaine	1+ times, ever	7.8%	4.5%	5.2%	10.5%	3.5%	5.4%
	Tried Inhalants	1+ times ever	15.1%	6.8%	11.7%	18.5%	5.7%	7.8%
	Abused Painkillers	1+ times ever, w/out Rx	21.4%	15.5%	17.5%	25.4%	13.9%	17.1%
SEX	Had Sexual Intercourse	1+ times, ever	45.1%	43.8%	39.9%	50.3%	41.6%	46.0%
	Currently Sexually Active	1+ partner, past 3 mos.	33.6%	31.7%	28.7%	38.5%	29.7%	33.8%
	Unprotected Sex	no condom last time for sexually active	36.5%	38.4%	27.8%	45.2%	34.5%	42.3%
INJURY	No Bike Helmet	'never/rarely' wore in past yr.	82.4%	81.9%	78.0%	86.9%	79.8%	84.1%
	No Seat Belt	'never/rarely' wore in past yr.	14.2%	12.3%	11.0%	17.5%	10.9%	13.7%
	Rode with Impaired Driver	rode w/alcohol drinker 1+ times, past mo.	29.4%	21.5%	25.0%	33.7%	19.8%	23.3%
PHYSICAL ACTIVITY	Obesity	>=95 th percentile for BMI	9.3%	10.4%	6.5%	12.1%	9.1%	11.7%
	Insufficient Physical Activity	<1hr, 5 times, past wk.	56.3%	55.3%	51.3%	61.2%	53.2%	57.4%
	Insufficient Fruits & Veg.	<5 servings/day, past wk.	78.4%	77.4%	74.3%	82.4%	75.6%	79.3%

¹ Source: RI 2009 high school YRBS (n=3,213)

² 95% Confidence Intervals (CIs) are used to determine statistical significance (e.g., if the CIs of two values overlap, one may not conclude there is a 'real' difference between the two values as the difference may be due to sampling error)